

Work Order ID 150044

Tuesday, August 23, 2016 11:14:52 AM

150044

Page 1

Item ID: D4121-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Hose Assembly
Start Date: 8/26/2016 Start Qty: 6.00 ***6*** Cust Item ID:
Required Date: 9/9/2016 Req'd Qty: 6.00 ***6*** Customer:
Reference:

Approvals: Process Plan: **DAS 21** Date: **AUG 23 2016** Tooling: _____ Date: _____ Run Start ***NR1***
QC: **9-89** Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
D4121	D								

100

100

Purchasing

Purchasing

PURCHASING

Memo

Create D2729-1 label and include with W/O

Issue P/O: **33397**

Hose Assembly as per Dwg D4121

Possible Supplier: API

Material release note is required

0.00

0.00

AUG 24 2016**DAS 13 9-89**

110

110

Packaging

Packaging

Receive & Inspect for Damage & Mat'l Certs

Memo

Ensure Material Release Note is attached

0.00

0.02

Lex 8/16/16 - 6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐									
Date : _____		Step #: _____		QTY Effective : _____				MRB (QSI042) Approval					
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval					
Root Cause		FAULT CATEGORY											
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐				Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐				Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
		OTHER : _____											

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Page 2

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC6- Inspect dimensions to drawing Memo	0.00 0.00				<u>6</u>			DAS 38 9-89 SEP 08 2016
130 *130* Small Fab Small Fab	Small Fab Memo Install D2729-1 as per Dwg D4121 using D2182-045 Heat Shrink Batch: <u>112922</u>	0.00 0.09				<u>6</u>	<u>FF</u>		SEP 13 2016
140 *140* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.02				<u>6</u>			DAS 38 9-89 SEP 13 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : _____							

SEP 14 2016

Work Order update only ☐

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev I

Tuesday, August 23, 2016 11:14:56 AM

150044

D4121-1

Required Qty: 6.00

FF sept-13-16

WORK ORDER NON-CONFORMANCE / UPDATE

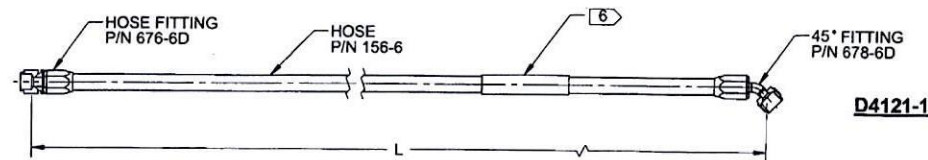
QA Closed: _____ Date: _____

Work Order update only ☐

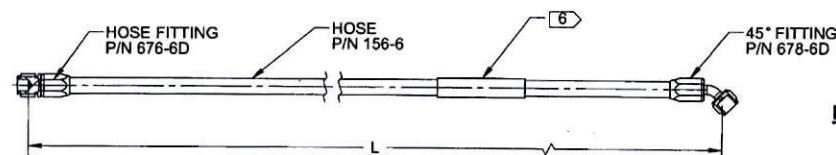
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OTHER : _____					

8 7 6 5 4 3 2 1

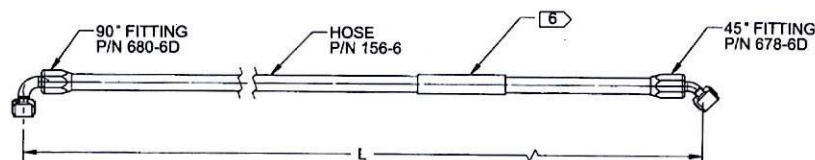
HOSE SPECIFICATION			
DART P/N	STRATOFLEX P/N	VENDOR	L
D4121-1	156003-6D0274	API/ AVIAL	27.50
D4121-3	156003-6D0590	API/ AVIAL	59.00
D4121-5	156062D1054D000	API/ AVIAL	105.50



D4121-1



D4121-3



D4121-5

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 150044 MJS
16-08-23

RELEASED
2011-11-16

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N & B/N USING D2729-1 LABEL INSTALLED WITH D2182-045 HEAT SHRINK
- 7) WEIGHT: N/A
- 8) STAINLESS STEEL COVERING TO HAVE MINIMUM THICKNESS OF 0.015"

D	P/N 156003-6D0590 WAS 156003-6D0570 (ZN D2-1)	RF	11.11.14
C	ADD P/N 156062D1054D000 TO D4121-5	RF	11.07.27
B	P/N 678-6D WAS P/N 678-6S (ZN C4-1, B4-1); P/N 676-6D WAS 676-6S (ZN D8-1, C8-1); P/N 680-6D WAS P/N 680-6S (ZN B8-1); UPDATE STRATOFLEX P/N (ZN C2-1); UPDATE NOTE 8	RF	11.03.07
A	NEW ISSUE	RF	10.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE USA, INC. KENT, WA DRAWING NO. D4121 TITLE HOSE ASSEMBLIES COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	
DRAWN	RF		
CHECKED	RF		
MFG. APPR.	RF		
APPROVED	RF		
DE APPR.	RF	REV. D SHEET 1 OF 1 SCALE NTS	
DATE	11.11.14		

8 7 6 5 4 3 2 1

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO33397**

Purchase Order Date 8/24/2016

PO Print Date 8/26/2016

Page Number 1 of 7

Order From :
AVIALL
PO BOX 842275

DALLAS, TX 75284-2275
USA

VU-AVI003

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED

REVISED
QTY

Contact Name
Vendor Phone 905-676-1695

Ship To Contact
Ship To Phone
Ship Via: FedEx Overnight collect
Ship Acct:

Buyer
Customer POID
Customer Tax #
Terms
Currency
FOB

Chantal Lavoie
10127-2607
Net 30
USD
EXW - (Ex Works)

AUG 26 2016

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
			Promise Date				
1	156003-6D0274	Hose Assembly ✓	8/31/2016 Yes 8/31/2016		6.00 Each	\$202.62	\$1,215.72
	AS PER DWG D4121 REV. D B150044						
					SP/6-9-16	Line Total:	\$1,215.72
2	156003-6D0590	Hose Assembly	8/31/2016 No 8/31/2016		4.00 Each	\$242.55	\$970.20
	AS PER DWG D4121 REV. D B150045					Line Total:	\$970.20
3	156062D1054D000	Hose Assembly	8/31/2016 Yes 8/31/2016		4.00 Each	\$439.80	\$1,759.20
	AS PER DWG D4121 REV. D B150046						

PO Instructions: Fedex Acc#151793240

Note:

8/26/2016



Hose Shop 2755 Regent Blvd. DFW Airport 75261
Phone 972-586-1380 Fax 972-586-1381 www.aviall.com

TSO CERTIFICATION

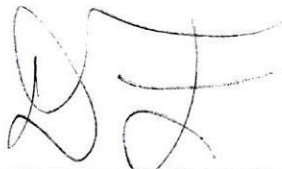
It is hereby certified that (A) The parts and/or materials reflected herein were produced under Federal Aviation Administration approved manufacturing and quality control system/methods as set forth in the FAA issued technical standard order authorizations (TSOA) issued to Stratoflex and (B) such part and/or materials are new and are in condition for safe operation.

Aviall Order Number: 1002422166

Part Numbers:

1. 156062D1054D000 4EA.
2. 156003-6D0590 4EA.
3. 156003-6D0274 6EA.

Sp/6 9-6

Signed: 

Date: 8-29-16

"Aviall is not providing OEM parts. Aviall is an authorized Stratoflex distributor providing TSO assemblies. Numbers referenced per customer requirements are for customer reference ONLY and are in no way intended to be represented as OEM parts. Any reference to an OEM part number does not authorize or reflect installation authority for this part. The installation authority is provided by the mechanic installing this product in accordance with FAR Part 43".

If applicable, satisfactory compliance with the conditions and tests required for TSO approval indicates the hose assembly has met the minimum performance standards as stated in the TSO. Furthermore, it is the responsibility of the installer to determine the installation eligibility and that it will not cause the hose assembly to be subjected to conditions in excess of those for which it has been approved.

FORM# CERT -001